

سُورَةُ الْمَاعُونِ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

أَرَأَيْتَ الَّذِي يُكَذِّبُ بِالْإِيمَانِ ﴿١﴾ فَذَلِكَ الَّذِي يَدْعُ الْيَتِيمَ ﴿٢﴾

وَلَا يَحْضُرُ عَلَى طَعَامِ الْمَسْكِينِ ﴿٣﴾ فَوَيْلٌ لِلْمُصَلِّينَ ﴿٤﴾ الَّذِينَ

هُمْ عَنْ صَلَاتِهِمْ سَاهُونَ ﴿٥﴾ الَّذِينَ هُمْ يُرَآءُونَ ﴿٦﴾ وَيَمْنَعُونَ

الْمَاعُونَ ﴿٧﴾



Ministry of Information
Technology

Universal
Service Fund
Telecom for all

NG-BSD National Highways and Motorways Projects

Enhanced access & coverage, Optimized Infrastructure
usage, better business case

21st June 2018



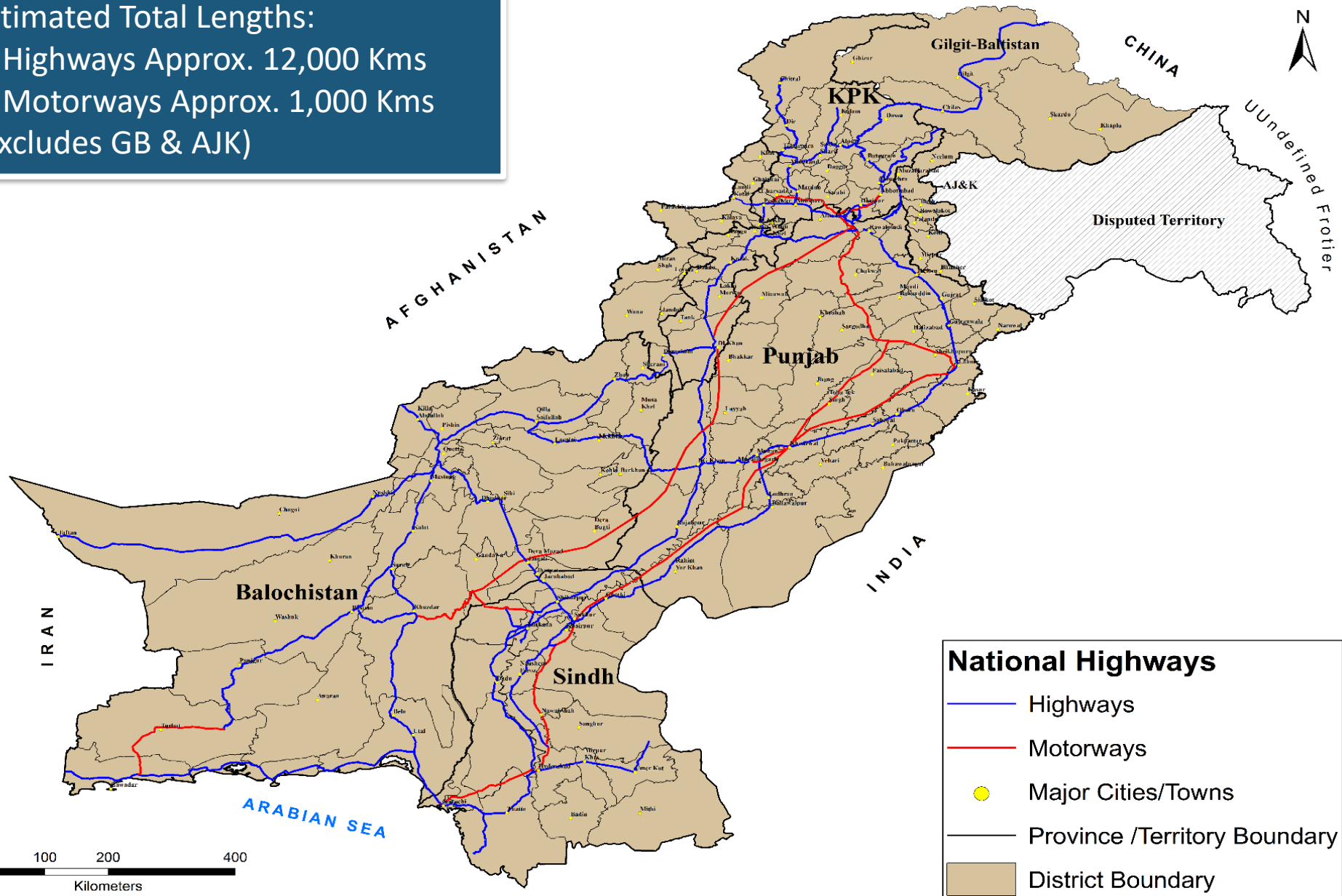
Country Wide Out look of HWs&MWs

Estimated Total Lengths:

Highways Approx. 12,000 Kms

Motorways Approx. 1,000 Kms

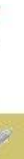
(Excludes GB & AJK)



Features & Changes

Feature	Before	Now
Targets	Population and Mauza Coverage in BSD Projects	Next Generation Broadband Infrastructure for un/under served segments of Motorways and Highways
Data Rates	256 Kbps	512Kbps Downlink, 128Kbps Uplink
Subsidy	Opex + Capex	No Opex Subsidy because built up areas
Project Timelines	24 months	18 months – accessible areas
Infra Sharing	Infrastructure Sharing for at least one SP	Infrastructure sharing for optimized use of resources

National Roaming for Highways and Motorways



Impact

- Connected Vehicles, App coverage for commuters, better emergency services, Reduced Urbanization
- Enhanced communication, Tracking, Surveillance, Information Collection to ensure Safety, Security and ensure efficiency

Scope

- All Four Provinces – Currently estimate: ~13000 Kms of Highways/Motorways, **appox. 8,000 Kms un-served w.r.t Broadband Services**
- More unserved sections and projects to be added in future as road infrastructure grows
- 3G/4G Services Coverage to these un-served road segments and Economic Zones en-route

Duration

- 18 Months for each lot



Estimated Route Lengths

Province	Motorways and National Highways		
	Total Route Length (Kms)	Served routes Length (Kms)	Unserved routes Length (Kms)
Balochistan	4,129	243	3,886
Sindh	2,407	1,051	1,356
Punjab	3,697	1,854	1,843
Khyber Pakhtunkhwa	2,215	1,556	659
Total	12,448	4,704	7,744

Note:

- This project will target route coverage instead of Mauza coverage
- Highways Project for FATA will be planned after the launch of BSD projects in FATA



National Roaming in USF Network

- *“National Roaming” is the capability to make and receive calls, send and receive data, or access other telecommunication services outside the geographical coverage area of user’s home network by using network of USF Service Provider*
- Benefits
 - Consumer satisfaction via service continuity and better Coverage
 - Additional Revenues for all operators, better Business case
 - Optimized use of infrastructure



National Roaming in USF Network

- A higher percentage of Motorways consumers will be roamers
- USF funded project must ensure availability of services to all
- The 1st Highway Project will be a test case for National Roaming
- The winning service provider will be **REQUIRED** to open up USF Segment of the network for roaming to all other operators
- Additional project cost for enabling Roaming may be added and highlighted in the bid

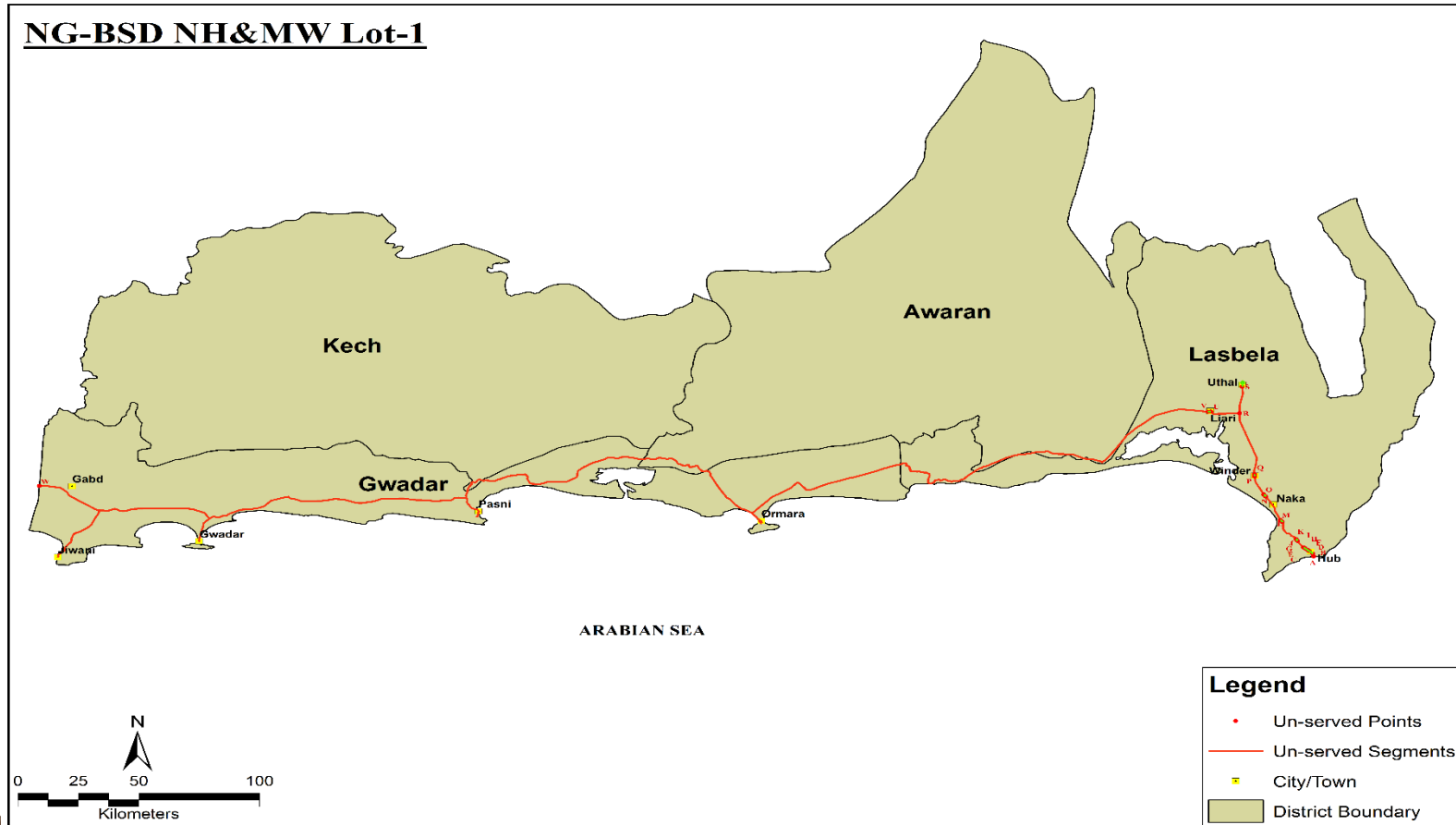


1st NH&MW Project – NG-BSD NH10-NH25

National Highways - N-25: RCD Highway from Hub to Winder (near Uthal) & N-10: Makran Costal Highway from Winder (near Uthal) to Jiwni (near Gwader).

Total length: 679 kms.

Unserved: 669 kms



Q&A



Ref. Clause 12 & 43 (a)

1. **There is no option to demand partial OPEX for 3 Years and format of Annex-1 has also been changed accordingly for this project.**

USF Response:

OPEX is not included in this project because these are accessible and built-up areas

2. **It is requested USFCo to continue the provision of partial OPEX in all projects (including this project) in line with existing practice, as the flexible competitive bidding is the best option to optimize outcome of the auction.**

USF Response: OPEX is not included in this project

3. **The OPEX omission coupled with additional/enhanced obligations will affect the business case of the BSD projects in general and this project in particular.**

USF Response: OPEX is not included in this project



National Roaming (1/2)

Ref. clause 16.4;

4. please clarify the scope of this obligation w.r.t. part of network under consideration and how long it would be mandated?

USF Response:

“National Roaming” is the capability to make and receive calls, send and receive data, or access other telecommunication services outside the geographical coverage area of user’s home network by using network of USF Service Provider

It will be mandatory for USF Network and Areas and for term of the contract

5. How many operators will be allowed to share services on National Roaming?

USF Response:

The winning service provider will be REQUIRED to open up USF Segment of the network for roaming to all USF Contributors/Operators



6. The USF service provider's KPIs under the contract and that of potential Roaming partners' license KPIs would be different. Therefore, the number of concurrent customers should be on mutually agreed terms – Please confirm and elaborate if there is any guidelines w.r.t. concurrent customers.

USF Response:

From a consumer perspective, roaming should be default on. USF Service provider and other network operators can make an agreement on network KPIs, estimated number of customers, by mutual agreement while adhering to QoS requirements as per their license.

7. National roaming should be on mutually agreed commercial models between operators- Please confirm

USF Response:

Roaming charges Price ceiling will be established for winning operators. Proposed is 1.25 or 1.5 times the tariff of given area/segments. Open for discussion



8. Few cities are yellow highlighted along the road. Whether these cities are optional/mandatory in planning stage OR only the roads leading to these cities need to be covered as mandatory area?

USF Response: Provision of USF services for unserved roads is mandatory. Yellow highlighted cities are only for reference and for better representation of map. Coverage for these cities is not required under this project.

9. No population is shared this time. Now in this lot, seamless coverage is required to the identified road segments to provide data rate defined in Schedule B of draft SSA (Annex-6 of RFA). Since population is not shared in this Lot, so there is no visibility of users.

USF Response: The primary target of this project is road coverage, hence population data is not relevant. USF service providers are required to provide seamless coverage for roads and plan network as per their assessment of expected number of all users (USF SP + Roaming). For initial planning it is recommended to plan sites with at least 10 Mbps backhaul per site and 2 TRXs per sector. Open for discussion



10. Data rate varies according to population & hence desired data rate DL of 512kbps would vary depending upon users. Please provide us the population along with percentages of population for coverage design (e.g. 60%) and percentage population for Data Rate (e.g. 1% of 60%)

USF Response: Please refer to reply to query no. 8 & 9

11. Technology details missing. As these are road sites so will they need to be on both 2G/3G ?

USF Response: USF Projects are technology neutral, the bidder may choose suitable technologies to provide USF Services. USF Services are defined in Schedule A and B of SSA and consist of voice and Broadband data services

12. What is the minimum data throughput that operator need to assure on these sites?

USF Response: USF Services are defined in Schedule B of SSA. The data rate required for downlink is 512Kbps and Uplink is 128Kbps

13. What is USF view on this lot in terms of coverage continuity as these are road sites?

USF Response: USF SP has to provide seamless coverage to unserved segments of the highway.



Thank You

Telecom for all

